

## **CHAPTER 1 POPULATION ELEMENT**

The Population Element provides an inventory and assessment of trends in population growth and in the demographic characteristics of the population. This information will assist the City in determining community service and infrastructure needs, employment opportunities, and housing needed to support the existing and future population.

Minimum requirements for local comprehensive plans require historic and current data as well as projections. "Current" refers to the year of plan preparation or the most recent year for which data is available. Historic data is required for the past 20 years (using the nearest decennial Census) prior to the year of plan preparation. Future projections must cover approximately 20 years beyond the year of plan preparation.

The information gathered in this inventory must be assessed to identify significant trends in the size of the local population and its characteristics (age distribution, educational attainment, income levels, etc.), especially as compared with regional and state trends. Further analysis of this information must be made under other plan elements in determining appropriate economic development strategies, housing and community facility needs, land development patterns, and so forth.

The City may also use the information gathered in the Population Element to determine whether the growth trends identified are desirable for the community and whether alternatives for managing or redirecting these trends should be considered. Such an assessment could result in the development of population-specific needs and goals that specify an appropriate rate of growth and an implementation strategy for managing the community's growth throughout the planning period.

The Plan must include the current, historic and projected total population of the community and compare the City's growth rate with that of the state. In addition to comparisons with the state, this analysis compares figures for the county and Atlanta region (defined as the Atlanta Regional Commission's jurisdiction of 10 counties in 1995).

### **POPULATION**

#### **Historic Population Trends**

Table 1.1 shows past population totals and ten-year percentage change for the City of Roswell, unincorporated and incorporated Fulton County. Roswell's population doubled during the 1980s from 23,337 persons in 1980 to 47,923 persons in 1990. Some of the City's population increase was due to the annexation of large developed subdivisions such as Brookfield West (1,063 acres) in 1986 and Willow Springs (550 acres), Litchfield (1,277 acres), Wexford (245 acres), and Wildwood Springs, Highland Colony and Laurel Lake (282 acres) in 1989. The City's 1990 population figure of 47,923 was adjusted slightly upward to 48,257 to compensate for an undercount during the 1990 Census.

Large annexations in 1999 help explain the huge increase in the population of Roswell between 1990 and 2000. Roswell completed the "Edenwilde," "Eastside," and "Hamilton Commons" annexations prior to the 2000 Census, which provided a spike in the City's population up to 79,334 persons in 2000.

**Table 1.1**  
**Historic Population Trends, 1980-2000**  
**City of Roswell and Fulton County**

<b>Jurisdiction</b>	<b>1980</b>	<b>% of County Population</b>	<b>1990</b>	<b>% of County Population</b>	<b>2000</b>	<b>% of County Population</b>
City of Roswell	23,337	4.0%	47,923	7.4%	79,334	9.7%
Fulton County	589,904	100%	648,951	100%	816,006	100%

Source: U.S. Census Bureau, Census of Population and Housing, 1980, 1990 (STF1, P001), and 2000 (SF1, P1).

The City increased its total population by 31,411 persons during the 1990s. The vast majority of this population gain during the 1990s was due to an increase in the household population (31,000 persons added from 1990 to 2000).

Table 1.2 shows the percentage change in population between decennial censuses. The City's growth rate from 1980 to 1990 and from 1990 to 2000 greatly exceeded the percentage increase in population of the county, metropolitan region, ARC region, and state as a whole.

**Table 1.2**  
**Historic Population Trends**  
**and Decennial Percentage Change, 1980-2000**  
**City, County, Regions, and State**

<b>Jurisdiction</b>	<b>1980</b>	<b>1990</b>	<b>% Change, 1980-1990</b>	<b>2000</b>	<b>% Change, 1990-2000</b>
City of Roswell	23,337	47,923	105.4%	79,334	65.5%
Fulton County	589,904	648,951	10.0%	816,006	25.7%
Atlanta MSA Region	2,233,229	3,069,425	37.4%	4,247,981	38.4%
Atlanta ARC Region	1,896,182	2,557,800	34.9%	3,429,379	34.1%
State of Georgia	5,463,105	6,478,149	18.6%	8,186,453	26.4%

Sources: See prior table for City and County figures. Atlanta MSA from Selig Center for Economic Growth, Terry College of Business, The University of Georgia, Georgia Statistical Abstract, 2004-2005, Table 1.102. State totals from College of Agricultural and Environmental Sciences and College of Family and Consumer Sciences, The University of Georgia, The 2002 Georgia County Guide. Atlanta ARC Region data from Atlanta Regional Commission, Population & Housing 2003, December 2003.

### **Current Population Estimates**

The U.S. Census Bureau's most recent population estimate for the City of Roswell, July 1, 2003, is 78,229 persons. That estimate of Roswell's population showed a slight decrease in City population between the 2000 Census and July 1, 2003. The City of Roswell challenged successfully the Census estimate by showing data on certificates of occupancy issued for new dwelling units. Per letter from John Long of the U.S. Census Bureau's Population Division dated October 7, 2004, Roswell's 2003 population estimate was adjusted from 80,114 to 83,911.

The Atlanta Regional Commission estimates Roswell's population in 2003 to be 80,503 (Population & Housing 2003, p. A-24), which is also considered to be too low based on the

City's own analysis of certificate of occupancy data for dwelling units. The current population of Roswell (January 2005) is approximately 85,000.

**Table 1.3**  
**Census Population Estimates, 2000-2003**  
**City, County, Metro Region, and State**

Jurisdiction	April 1, 2000 (Census)	Census Population Estimates			
		July 1, 2000	July 1, 2001	July 1, 2002	July 1, 2003
Roswell	79,334	80,038	79,747	79,316	83,911
Atlanta MSA	4,247,981	n/a	n/a	4,509,540	n/a
Fulton County	816,006	817,043	821,951	819,777	818,322
Georgia	8,186,453	8,230,094	8,394,795	8,544,005	8,684,715

Source: U.S. Census Bureau, 2004. Annual Estimates of the Population for Incorporated Places in Georgia, Listed Alphabetically: April 1, 2000 to July 1, 2003; and Annual Estimates of the Population for Counties of Georgia: April 1, 2000 to July 1, 2003. 2003 Roswell estimate from Census Bureau letter dated October 7, 2004 from John Long, Chief, Population Division. Atlanta MSA data are U.S. Census Bureau estimates reported by Selig Center for Economic Growth, Terry College of Business, The University of Georgia, in [Georgia Statistical Abstract, 2004-2005](#), Table 1.102.

### **Components of Population Change**

Population changes in cities occur due to three components -- natural increase or decrease (births minus deaths), net-migration (in-migration minus out-migration) and annexation. As noted above, most of the recent population growth in Roswell is attributed to annexation. Future annexations cannot be predicted. Data on migration are not provided for cities. Vital statistics are available for cities and counties. The 2020 Comprehensive Plan had compiled vital statistics for Roswell's population in the 1990s, which is provided in Table 1.4 below. The absolute numbers in Table 1.4 have little relevance other than historic value, since Roswell's eastside annexation in 1999 increased Roswell's population substantially.

**Table 1.4**  
**Natural Increase of the Population, 1990-1997**  
**City of Roswell**

Year	Number of Births	Number of Deaths	Natural Increase
1990	601	216	385
1991	584	227	357
1992	596	222	375
1993	654	258	396
1994	730	285	445
1995	N/A	N/A	N/A
1996	774	289	485
1997	1196	383	813

Note: N/A = Not available. Source: Georgia Department of Human Resources, Vital Statistics Unit, 1999.

For purposes of estimating the natural increase of Roswell's population, one can use the ten-year (1990-1999) cumulative birth rate for Fulton County of 16.7 live births per 1,000 total population ([Georgia County Guide 2002](#), p. 158). Because Roswell's population is

predominantly White, it is probably more accurate to use the ten-year cumulative birth rate for Whites in Fulton County, which is lower at 15.2 live births per 1,000 total population (Georgia County Guide 2002, p. 158). The ten-year cumulative (1990-1999) death rate for Fulton County was 9.0 deaths per 1,000 total population (9.1 for Whites in Fulton County) (Georgia County Guide 2002, p. 166). Considering births and deaths, Whites in Fulton County during the 1990s naturally increased in number at a rate of 6.1 persons per 1,000 annually.

The birth rates for the 1990s in Fulton County may not hold true in the future because the aging population will probably lower fertility rates considerably. Nonetheless, it is instructive to see the natural increase of Roswell's population, as shown in Table 1.5 below, which indicates that Roswell's population will increase due to natural increase (births minus deaths) by approximately 520-530 people per year, assuming the 6.1 persons per 1,000 rate.

**Table 1.5**  
**Total Population with Natural Increase**  
**City of Roswell, 2005-2010**

<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
85,000	85,519	86,041	86,565	87,093	87,624

Source: Jerry Weitz & Associates 2004 based on ten-year birth and death rates for Fulton County (White Population) as reported in the Georgia County Guide 2002.

Although migration data are not available, the decennial Census reports place of residence in 1995, which provides some insight to migration patterns. Table 1.6 indicates that a substantial majority of Roswell's residents in 2000 changed residences from 1995 to 2000. This is an important finding that is consistent with prior reported findings about mobility – a majority of Americans tend to relocate in a given five-year period.

**Table 1.6**  
**Residence in 1995, Population 5 Years and Over in 2000**  
**City of Roswell**

<b>Residence in 1995</b>	<b>5 Years and Over</b>	<b>% of 5 Years and Over</b>
Lived in same house in 1995	31,360	42.1%
Lived in different house in 1995	43,172	57.9%
Total 5 years and Over	74,532	100%

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF1, P24).

The Census statistics also reveal the general location of prior residency in 1995. Table 1.7 provides those data. In addition, though not shown in the figures below, the vast majority (96 percent) of residents who moved from other places to Roswell between 1995 and 2000 resided in metropolitan statistical areas or primary metropolitan statistical areas (Census 2000 SF 1, P25).

**Table 1.7**  
**Location of Residence, State and County Level**  
**Population 5 Years and Over Living in Different House in 1995**  
**City of Roswell**

<b>Residence in 1995</b>	<b>5 Years and Over</b>	<b>% 5 Years and Over</b>
Lived in Fulton County	11,928	27.6%
Lived in other counties in Georgia	10,197	23.6%
Lived in state in Northeast region of U.S.	3,740	8.7%
Lived in state in Midwest region of U.S.	2,763	6.4%
Lived in state in South region of U.S.	7,525	17.4%
Lived in state in West region of U.S.	2,067	4.8%
Lived elsewhere including foreign countries	4,952	11.5%
Total 5 years and Over living in different house in 1995	43,172	100%

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF1, P24).

### **HOUSEHOLD AND GROUP QUARTERS POPULATION**

In 1990, Roswell had a household population of 47,706 persons (99.5% of the total population) and a group quarters (non-household) population of 217 persons. The group quarters population as of 2000 consisted of 628 persons, with 575 persons in other non-institutional group quarters and 53 persons in institutional group quarters which include correctional and other institutions. The 2000 Census data indicate no nursing home population in Roswell (2000 Census, SF1, Table P37).

**Table 1.8**  
**Historic Household and Group Quarters Populations, 1990-2000**  
**City of Roswell**

<b>Type of Population</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Household Population	47,706	99.5%	78,706	99.2%
Group Quarters Population	217	0.5%	628	0.8%
Total Population	47,923	100%	79,334	100%

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF1, Table P015) and 2000 (SF1, Table P26).

The group quarters population increased since 1990 and is attributed to the addition of new personal care homes in the City. As the population ages, more and more elderly persons will reside in group quarters (institutionalized living) environments. As a basis for comparison, approximately 2.7 percent of the state's population resided in group quarters in 1990. Based on the elderly population projected to reside in Roswell during the next twenty years and these comparisons, an increasing percentage of the total population will likely reside in group quarters. The 2020 Comprehensive Plan found that the percentage of total population living in group quarters could reach three percent by the year 2020, due primarily to increased numbers of senior citizens. The group quarters population, like household population, is dependent on land available for institutional residential living facilities.

## **HOUSEHOLDS**

### **Household Size**

Table 1.9 shows the persons per household in 1990 and 2000 for both family households and total households. Persons per family is the number of persons in families divided by the total number of families. Persons per household is the number of persons in households divided by the total number of households.

Regarding the average household size, there has been a historic decline in the United States over time. "Between 1950 and 1980, the persons per household ratio declined by an average of 8.4 percent," and "during the 1970s the ratio declined 11.6 percent." The steadily decreasing average household size has been attributed primarily to an increasing number of one- and two-person households, for various reasons, including: postponement of marriage and a resulting increase in the number of never-married persons over thirty years of age; more adults who have been divorced, separated, or widowed and who have been able to live by themselves apart from families and relatives; the "undoubling" of unmarried or previously married adults that have split off from families headed by a married couple or other relative; rises in income that enable many single persons to establish their own household; a drop in female fertility; and increased rate of participation in the labor force by women. The decline of the "nuclear" family has also caused the historic average household size to drop over time (Gellen 1985).

Despite this historic decrease in household size, it no longer appears to be a trend. The Roswell 2020 Comprehensive Plan noted that the Atlanta Regional Commission found that household size in the region had not changed during the 1990s. Indeed, a comparison of 1990 and 2000 household sizes for the City and state indicate that household sizes have stabilized or even increased.

**Table 1.9**  
**Household Size, 1990-2000**  
**City of Roswell and State of Georgia**  
**(Persons per Household)**

Type of Household	Roswell		State of Georgia	
	1990	2000	1990	2000
Average Household Size	2.62	2.61	2.66	2.65
Average Household Size, Owner-Occupied Units	2.84	2.68	2.76	2.71
Average Household Size, Renter-Occupied Units	2.17	2.46	2.49	2.51
Average Family Size	3.07	3.07	3.16	3.14

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (Summary Population and Housing Characteristics, Georgia. Issued August 1991) and 2000 (SF1, P17, P33, H12).

As evident by numbers in Table 1.9, average household size in both Roswell and the State of Georgia remained more or less the same from 1990 to 2000, thus modifying the continuous historical decline. Figures in Table 1.9 help explain the stabilization of household size. The household size of owner-occupied units decreased from 1990 to 2000 for both Roswell and Georgia as a whole. Renter-occupied households, on the other hand, have increased

substantially in Roswell (from 2.16 persons in 1990 to 2.46 persons in the year 2000). In the state as a whole, there has been a slight increase in the average size of renter-occupied households.

While the general trend is toward no increase in household size (and modest decreases), it is worth noting that due to changing demographic trends such as an increase in the Hispanic population, some housing units and neighborhoods probably do encounter increases in the number of occupants per dwelling.

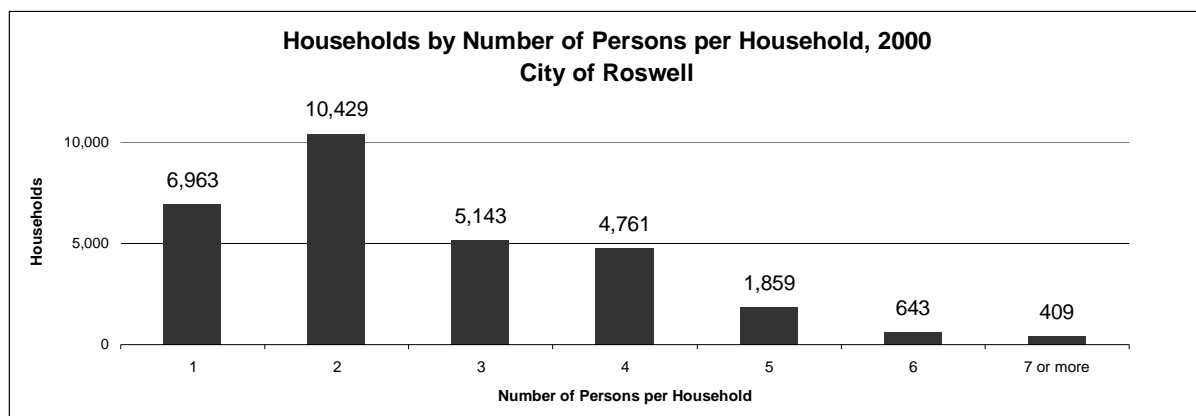
## **Households**

A household includes all the persons who occupy a housing unit. Though required to be reported, 1990 Census figures have now been rendered obsolete with the “eastside” and other annexations. The number of households is important because it reflects the needs for housing units. The City added 12,018 households during the 1990s. A detailed classification for City households is provided in Table 1.10, which indicates the number of households by the number of persons living in the household in 1990 and 2000.

**Table 1.10**  
**Households by Number of Persons per Household, 1990 and 2000**  
**City of Roswell**

<b>Household by Number of Persons</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
1-person household	3,730	20.5%	6,963	23.1%
2-person household	6,195	34.1%	10,429	34.5%
3-person household	3,550	19.5%	5,143	17.0%
4-person household	3,205	17.6%	4,761	15.8%
5-person household	1,096	6.0%	1,859	6.2%
6-person household	306	1.7%	643	2.1%
7-or-more person household	107	0.6%	409	1.4%
Total households	18,189	100%	30,207	100%

Sources: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. 1990 Census of Population and Housing. Summary Tape File 1A. Compiled by the Atlanta Regional Commission, 1991. U.S. Census Bureau, Census of Population and Housing, 2000 (SF1, P26).



**Figure 1.1**

The U.S. Census Bureau defines a family as “a householder and one or more other persons living in the same household who are related to the householder by birth, marriage, or adoption.” As shown in Table 1.11 below, nearly three quarters of the households were family households in 1990. The number of “family” households increased by 7,648 between 1990 and 2000, but as a percentage of total households declined slightly during the 1990s. Non-family households accounted for about 31 percent of the total households in the City in 2000.

**Table 1.11**  
**Households by Type of Household, 1990-2000**  
**City of Roswell**

<b>Households By Type</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Family Households	13,275	73.0%	20,923	69.3%
Non-family Households	4,914	27.0%	9,284	30.7%
Total Households	18,189	100%	30,207	100%

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF1, P027) and 2000 (SF1, P26).

## **AGE**

Age is the single most important dimension of the population. There can be vast differences in the needs of children versus the elderly. Age has a relationship to the labor force – workers include the population ages 16 years and over through retirement age and sometimes beyond. Age has important relationships to housing and can help predict likely first-time homebuyers, renters, owners of second homes, etc. Age can also affect the political situation: for instance, in cities where there is a large percentage of elderly, they sometimes vote down bond referendums for schools.

The relationship of the age of population to the needs for community facilities and services is also very important. For instance, a high elderly population often translates into a need for health care and nursing and personal care homes. On the other hand, a town with many children signals a need for schools, day care centers, and playgrounds. More information on the implications of age is provided by looking at characteristics of various age groups.

## **Historic Age Distribution**

Minimum planning standards require that the Population Element include the current, historic and projected age distribution of residents in the community. Table 1.12 provides age details for Roswell’s population by five-year age cohort in 1990 and 2000. Future trends in the age of the population are discussed in a later section of this chapter.

## **Persons 20 to 44 Years Old**

This segment of Roswell’s population increased from 21,824 to 32,620 from 1990 to 2000. This age group is the younger segment of the prime working-age population. This demographic group includes first-time homebuyers, as well as, households that are upgrading housing for the first or second time. This demographic group also provides the bulk of the labor force.



**Table 1.12**  
**Historic Population by Age Cohort, 1990-2000**  
**City of Roswell**

<b>Age Group</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
0-4	3,393	7.1%	5,504	6.9%
5-9	3,358	7.0%	5,271	6.6%
10-14	3,319	6.9%	5,288	6.7%
15-19	3,238	6.8%	5,100	6.4%
20-24	3,213	6.7%	4,753	6.0%
25-29	4,136	8.6%	6,672	8.4%
30-34	4,529	9.5%	6,817	8.6%
35-39	4,702	9.8%	7,237	9.1%
40-44	5,244	10.9%	7,141	9.0%
45-49	3,869	8.1%	6,695	8.4%
50-54	2,469	5.2%	6,272	7.9%
55-59	1,769	3.7%	4,189	5.3%
60-64	1,393	2.9%	2,443	3.1%
65-69	1,203	2.5%	1,703	2.1%
70-74	809	1.7%	1,455	1.8%
75-79	568	1.2%	1,229	1.5%
80-84	398	0.8%	821	1.0%
85+	313	0.7%	744	0.9%
<b>TOTAL</b>	<b>47,923</b>	<b>100%</b>	<b>79,334</b>	<b>100%</b>

Sources: U.S. Census Bureau, Census of Population and Housing, 1990 (STF1, P011) and 2000 (SF1, P12).

#### Persons 45 to 64 Years Old

This segment of Roswell's population increased by approximately 10,000 persons, from 9,500 in the year 1990 to 19,599 in the year 2000. This age group is the older segment of the labor force. Some persons in this category will retire early. Persons in this age category typically have the greatest amount of disposable income when compared with other age groups. They are not as likely to change residences, although the more affluent households may look for and purchase second homes. This group is probably less demanding of public facilities and services such as schools and parks. By the end of the planning horizon (2025), all of these people will be age 65 or older.

#### Persons 65 Years and Over

This segment of Roswell's population increased modestly, from 3,291 persons in the year 1990 to 5,962 in the year 2000. This age group is commonly referred to as the "elderly" and the "retirement age" population. Most of the people in this age group are no longer in the work force. While some elderly households may have more disposable income than ever before in their lifetimes, many elderly households will have limited incomes because they are no longer earning wages and salaries. Persons who own residences in this age group are likely to eventually seek alternative housing, because they may own large homes that provide more living space than needed, they have little desire to upkeep residential grounds and structures, they experience a need for closer societal relationships with others as family relationships

devolve, and because they are more likely than other age groups to need assisted care or medical attention. Because of differences in life expectancy between men and women, a very high proportion of older persons are and will be women. The differences in life expectancy also contribute to the number of elderly women living alone, many of whom are likely to have inadequate income (Howe, Chapman and Baggett, 1994).

### **Median Age**

Women have a higher median age than men in the city, county, and state as of 2000. This difference is not surprising given the longer life expectancies of females. Roswell had median ages that were significantly higher than the median age for the county and state in 2000. That held true for both males and females in 2000, as indicated in Table 1.13 below.

**Table 1.13**  
**Median Age of the Population, 2000**  
**City, County, and State**

<b>Jurisdiction</b>	<b>Median Age, 2000, Both Sexes</b>	<b>Median Age, 2000, Males</b>	<b>Median Age, 2000, Females</b>
City of Roswell	35.2	33.6	36.6
Fulton County	32.7	31.6	33.8
State of Georgia	33.4	32.1	34.6

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF1, P13).

### **HISPANIC ORIGIN AND RACIAL COMPOSITION**

Hispanic origin is not a race, and thus it is noted separately in Census statistics. Roswell's Hispanic and Latino population has increased since 1990 like virtually all other communities in metropolitan Atlanta. Census statistics (Table 1.14) indicate Roswell had 1,285 persons of Hispanic origin in 1990. That number grew to 8,421 in the year 2000, an increase of more than 7,000 persons. It is anticipated that this trend of an increasing Hispanic or Latino population will continue throughout the planning horizon.

The Hispanic population in Roswell has a significant language barrier to overcome. A 1997 study of the Hispanic population residing at Frazier Street Apartments revealed that 45 percent of the respondents did not speak English at all, and another 35% of the respondents did not speak English well (Sage 2000, in Roswell 2020 Comprehensive Plan).

**Table 1.14**  
**Hispanic or Latino Population, 1990 and 2000**  
**City of Roswell**

<b>Origin</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Not Hispanic	46,638	97.3%	70,913	89.4%
Hispanic or Latino	1,285	2.7%	8,421	10.6%
Total Population	47,923	100%	79,334	100%

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF1, P009) and 2000 (SF1, P4).

As shown in Table 1.15, the racial composition of Roswell's population is predominantly White. Blacks comprised approximately five percent of the City's population in 1990 and 8.5 percent in 2000. Although it has diversified to some extent during the 1990s, the City's population is homogeneous. However, the minorities have increased as a percentage of the total population to 18.5 percent as of 2000. As to trends, there is likely to be greater diversity in the City's population as it continues to increase during the planning horizon.

**Table 1.15**  
**Racial Composition of the Population, 1990-2000**  
**City of Roswell**

<b>Race</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
White	44,162	92.2%	64,666	81.5%
Black or African American	2,327	4.9%	6,773	8.5%
American Indian and Alaska Native	64	0.1%	160	0.2%
Asian	851	1.8%	2,964	3.7%
Other race	519	1.1%	3,260	4.1%
Two or more races	N/A	--	1,511	1.9%
Total	47,923	100%	79,334	100%

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF1, P006) and 2000 (SF1, P3).

## **POPULATION BY SEX**

As noted in Table 1.16 below, the population in Roswell as of 2000 was comprised evenly with regard to males and females. The same is generally true for the county and state's population in 2000.

**Table 1.16**  
**Population by Sex, 2000**  
**City, County, and State**

<b>Jurisdiction</b>	<b>Male</b>	<b>Percent of Total</b>	<b>Female</b>	<b>Percent of Total</b>
City of Roswell	39,664	50.0%	39,670	50.0%
Fulton County	401,726	49.2%	414,280	50.8%
State of Georgia	4,027,113	49.2%	4,159,340	50.8%

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF1, P12).

## **EDUCATIONAL ATTAINMENT**

Knowing the educational levels of the population helps to determine the types of economic development strategies needed.

### **Education of the Adult Population**

Minimum planning standards require a comparison of educational attainment levels of the City with surrounding counties and the state. The purpose of such an analysis is to determine how competitive the educational levels of the local population are with the area labor force.

As of 1990, Roswell had the highest percentage of total population with a high school degree or higher than any other jurisdiction (see Table 1.17).

**Table 1.17**  
**Comparison of Educational Attainment, 1990**  
**Persons 25 Years and Over**  
**City, County, Selected Counties, and State**

<b>Jurisdiction</b>	<b>% High School Graduate or Higher</b>	<b>% with Bachelor's Degree or Higher</b>
City of Roswell	92.3%	45.6%
Cherokee County	75.2%	18.4%
Forsyth County	67.6%	15.6%
Fulton County	77.8%	31.6%
Gwinnett County	86.7%	29.6%
State of Georgia	70.9%	19.3%

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF3, P057)

Year 2000 comparative figures are provided in Table 1.18. Like in 1990, Roswell's population held the distinction of being substantially more educated as a whole than selected counties and the state. A majority of Roswell's residents in 2000 had a bachelor's degree or higher, compared with only about one-quarter of all residents of the state in 2000. Roswell also has a very low percentage of its citizens without a high school diploma.

**Table 1.18**  
**Comparison of Educational Attainment, 2000**  
**Persons 25 Years and Over**  
**City, County, Selected Counties, and State**

<b>Jurisdiction</b>	<b>% Not Completing High School</b>	<b>% With Bachelor's Degree or Higher</b>
City of Roswell	7.7%	52.6%
Cherokee County	11.2%	25.0%
Forsyth County	14.3%	34.6%
Fulton County	16.0%	41.4%
Gwinnett County	12.7%	34.1%
State of Georgia	21.4%	24.3%

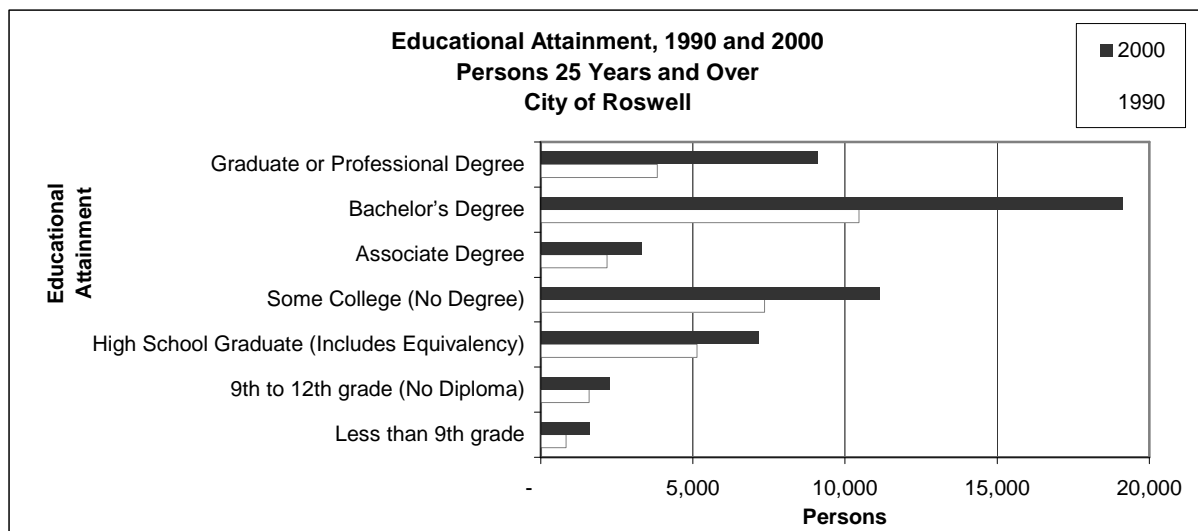
Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, P37)

Table 1.19 provides detailed educational attainment statistics for the City of Roswell's population in 1990 and 2000. These numbers indicate that Roswell has continued throughout the 1990s to attract and maintain some of the most educated people in the State of Georgia.

**Table 1.19**  
**Educational Attainment, 1990 and 2000**  
**Persons 25 Years and Over**  
**City of Roswell**

<b>Educational Attainment</b>	<b>1990</b>	<b>%</b>	<b>2000</b>	<b>%</b>
Less than 9 <sup>th</sup> grade	830	2.6%	1,607	3.0%
9 <sup>th</sup> to 12 <sup>th</sup> grade (No Diploma)	1,591	5.1%	2,246	4.2%
High School Graduate (Includes Equivalency)	5,137	16.4%	7,163	13.3%
Some College (No Degree)	7,360	23.4%	11,132	20.7%
Associate Degree	2,175	6.9%	3,308	6.2%
Bachelor's Degree	10,464	33.3%	19,139	35.6%
Graduate or Professional Degree	3,839	12.2%	9,108	17.0%
<b>Total Adult Population 25 Years and Over</b>	<b>31,396</b>	<b>100%</b>	<b>53,703</b>	<b>100%</b>

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF3, P057) and 2000 (SF3, P37)



**Figure 1.2**

During the 1990s, 22,307 persons were added to the City's adult population. What is significant is the increase in the number of persons who do not have a high school diploma. That number rose during the 1990s in the City. As of 2000, 3,853 of the City's adult residents (more than 7% of the City's adult population) did not have a high school diploma in 2000.

Based on an analysis of educational attainment data, it appears that a small segment of Roswell's population could benefit from adult education programs. Educational attainment is most crucial in terms of the labor force and job market. Improving the educational attainment of the disadvantaged segment of the City's adult population should be considered a priority, especially in order to improve their competitiveness in the job market. ***(requires policy discussion)***

## **Education Statistics**

Table 1.20 shows Scholastic Assessment and Stanford Achievement test scores for Fulton County and the State of Georgia, including private schools. These scores indicate that students of public and private schools in Fulton County have consistently scored higher than the statewide scores.

**Table 1.20**  
**Selected Test Scores, 2001**  
**Fulton County and Georgia**

<b>Test Name (Grade)</b>	<b>Fulton County</b>	<b>State of Georgia</b>
<b>Scholastic Assessment Test Highest Average Scores</b>		
Verbal	522	496
Math	533	495
<b>Stanford Achievement Tests Composite Scores</b>		
Grade 3	57	46
Grade 5	62	50
Grade 8	60	47

Source: Georgia Department of Education. In the 2002 Georgia County Guide (21<sup>st</sup> Ed.). University of Georgia.  
Note: Georgia totals include private school students tested.

The comparison of Scholastic Aptitude Test (SAT) scores for Roswell's high schools and the county, state, and national scores reveals important trends (See Table 1.21). During the last five years, SAT scores nationally and statewide have increased only marginally. The Fulton County School System as a whole has produced higher SAT scores than the nation and far better than the state as a whole. Students from two of Roswell's three high schools – Roswell High and Centennial High – have performed significantly higher than the Fulton County system as a whole. Students at Independence High had scores that have remained significantly below that of the county system as a whole.

**Table 1.21**  
**Comparison of Total SAT Scores, 2000-2004**  
**City, County, State, and Nation**

<b>High School or System</b>	<b>Location</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>
Centennial	Scott Rd.	1,064	1,082	1,095	1,094	1,132
Independence	Mimosa Blvd.	972	958	973	983	984
Roswell	King Rd.	1,104	1,108	1,096	1,117	1,117
Total Fulton	Countywide	1,021	1,033	1,039	1,049	1,056
Georgia	Statewide	974	980	980	984	987
National	Nationwide	1,019	1,020	1,020	1,026	1,026

Source: Fulton County School System web page, accessed 11/19/04.

Table 1.22 provides selected educational statistics for Fulton County and Georgia from 1995 to 2001. Again, Fulton County students compare favorably with those of the state on all accounts. These historic data reveal that Fulton County schools are more inclined than schools of the state as a whole to attend public college and less inclined to attend vocational-technical schools. Scores on graduate tests have been consistently higher for students of Fulton County than students of the state. High school dropout rates have been also well below the state figures in Fulton County.

**Table 1.22**  
**Educational Statistics, 1995-2001**  
**Fulton County and Georgia**

<b>High School Drop Out Rate (%)</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Fulton County	6.0	5.1	6.7	5.6	6.5	4.3	4.2
State of Georgia	9.3	8.6	7.3	6.5	6.5	6.5	6.4

<b>Graduates Attending Georgia Public Colleges (%)</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Fulton County	30.6	41.2	42.9	39.6	42.7	NA	NA
State of Georgia	35.0	30.0	30.2	38.8	37.5	37.3	36.1

<b>Graduates Attending Georgia Public Technical Schools (%)</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Fulton County	1.6	1.0	2.2	1.2	1.8	1.6	NA
State of Georgia	5.4	6.2	7.1	6.5	6.4	7.4	8.8

<b>High School Graduation Test Scores (All Components) (%)</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
Fulton County	87	79	72	75	73	79	77
State of Georgia	82	76	67	68	66	68	65

Source: Georgia Department of Education. In Plan Builder, DCA, accessed 11/19/04.

### **School Enrollment**

**Table 1.23**  
**School Enrollment by Level of School by Type of School**  
**Population Three Years and Over, 2000**  
**City of Roswell**

<b>Enrolled in:</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>	
	<b>Public</b>	<b>Private</b>	<b>Public</b>	<b>Private</b>	<b>Public</b>	<b>Private</b>
Nursery school, preschool	226	632	310	561	536	1,193
Kindergarten	448	128	387	40	835	168
Grade 1 to Grade 4	1,874	368	1,859	270	3,733	638
Grade 5 to Grade 8	1,999	300	1,717	441	3,716	741
Grade 9 to Grade 12	2,161	321	2,035	262	4,196	583
College, undergraduate	1,189	276	977	365	2,166	641
College, graduate or professional	353	150	288	269	641	419
Total enrolled in school	8,250	2,175	7,573	2,208	15,823	4,383
Not enrolled in school	27,680		28,553		56,233	

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, P36)

In 2000, the City had 76,439 persons three years and over (2000 Census, SF3, P36). Detailed data for school enrollment of City of Roswell residents in 2000 are provided in Table 1.23. In terms of elementary and secondary education, 1,972 students who resided in Roswell in 2000 attended a private school. This represents 14 percent of all elementary and secondary school students.

## **INCOME**

Georgia minimum planning standards require that the Population Element include current and historic average per capita and average household income levels, and comparisons of local data with state levels for the same time intervals and in the same dollar units. Minimum standards also require that the Population Element include the current distribution of households by income groupings.

### **Per Capita Income**

On the basis of per capita income, Roswell's populace in 1990 was the most affluent of any city of significant size (i.e., over 2,500 population) in the state. There were some very small cities, such as Avondale Estates in DeKalb County and Berkeley Lake in Gwinnett County that had higher per capita incomes in 1989 than Roswell. There are also some "Census designated places," (i.e., unincorporated areas) such as Skidaway Island in Chatham County, Dunwoody in DeKalb County, and Sandy Springs in North Fulton County that had higher per capita incomes than Roswell in 1990.

In the years 1990 and 2000, the per capita income of Roswell's residents was significantly higher than that of Fulton County, Georgia, and the nation (see Table 1.24). These numbers are not surprising, given the influx of middle-class and wealthier households into Roswell.

**Table 1.24**  
**Comparison of Per Capita Income 1990 and 2000**  
**City, County, State, and Nation**

<b>Jurisdiction</b>	<b>1990</b>	<b>2000</b>
City of Roswell	\$24,080	\$36,012
Fulton County	\$18,452	\$30,003
State of Georgia	\$13,631	\$21,154
United States	\$14,420	\$21,587

Source: U.S. Census Bureau, Census of Population and Housing, 1990 (STF3, P114A) and 2000 (SF3, P82). 1995 data from U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System. In the 2002 Georgia County Guide (21<sup>st</sup> Ed.). University of Georgia.

### **Median Household Income**

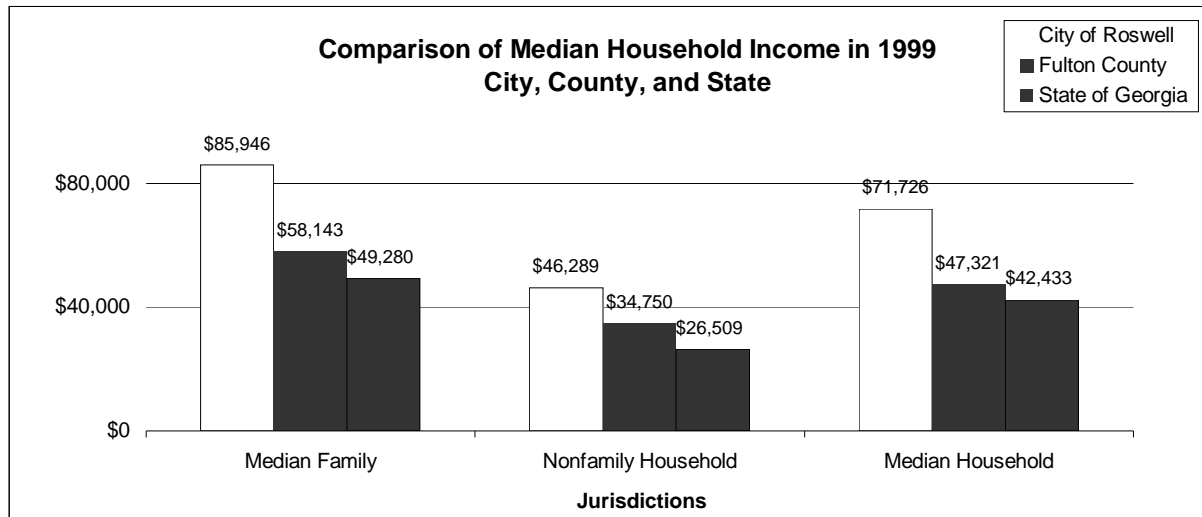
City household incomes, whether family, nonfamily, or total households, were substantially higher than the county and state medians in 1999, as shown in Table 1.25.



**Table 1.25**  
**Comparison of Median Household Income in 1999**  
**City, County, and State**

<b>Income</b>	<b>City of Roswell</b>	<b>Fulton County</b>	<b>State of Georgia</b>
Median Family	\$85,946	\$58,143	\$49,280
Nonfamily Household	\$46,289	\$34,750	\$26,509
Median Household	\$71,726	\$47,321	\$42,433

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, P53, P77, P80)



**Figure 1.3**

Household income varies with age. Household incomes increase steadily until ages 45-54 (upward mobility), then they usually begin to decline in retirement years. The highest earnings are achieved by married couples with two wage earners. Income increases with increases in education (i.e., there is a positive relationship between these two variables).

Household income is higher for owner-occupied households than renter-occupied households. In Roswell, the median household income for owner-occupied households in 2000 was \$93,152, and for renter-occupied households it was \$44,722 (SF 3, Table HCT 12).

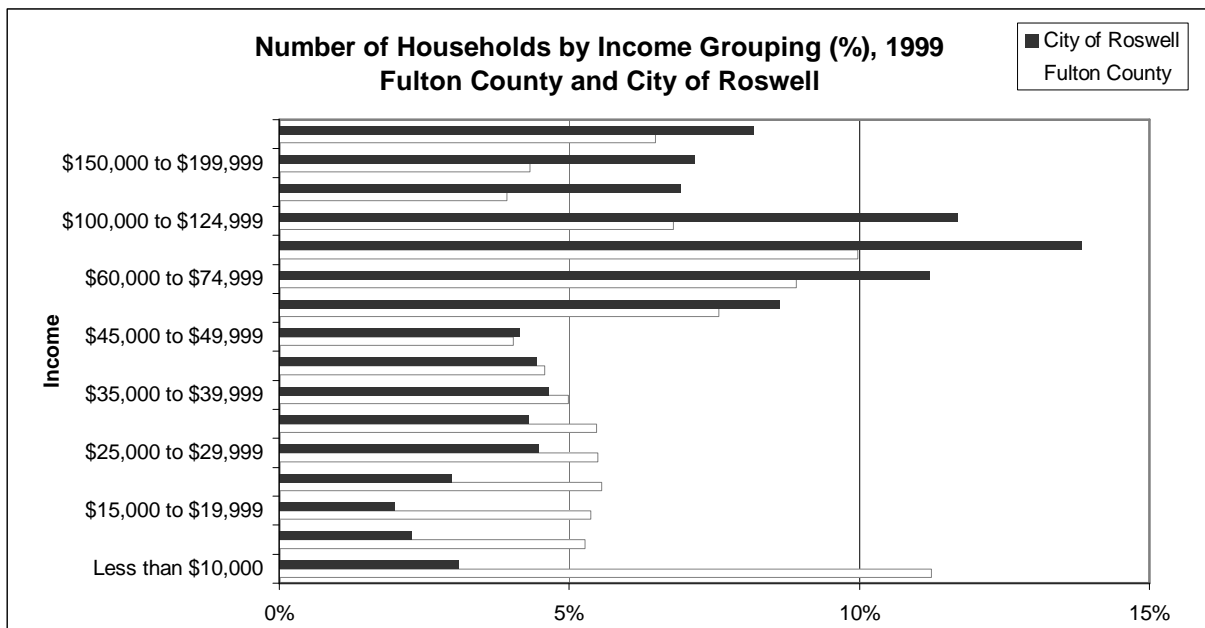
### **Household Distribution by Income Groupings**

The household income data shown in Table 1.26 indicate a significant difference between incomes of Fulton County households as a whole and the incomes of households living in Roswell. For Roswell as a whole, 68 percent of all households had incomes of more than \$50,000 compared to Fulton County's 48 percent in 1999.

**Table 1.26**  
**Number of Households by Income Grouping, 1999**  
**Fulton County and City of Roswell**

Income Grouping in 1999	Fulton County		City of Roswell	
	Households	Percent of Total Households	Households	Percent of Total Households
Less than \$10,000	36,099	11.2%	939	3.1%
\$10,000 to \$14,999	16,923	5.3%	692	2.3%
\$15,000 to \$19,999	17,269	5.4%	606	2.0%
\$20,000 to \$24,999	17,869	5.6%	904	3.0%
\$25,000 to \$29,999	17,637	5.5%	1,358	4.5%
\$30,000 to \$34,999	17,588	5.5%	1,303	4.3%
\$35,000 to \$39,999	16,004	5.0%	1,413	4.7%
\$40,000 to \$44,999	14,722	4.6%	1,348	4.4%
\$45,000 to \$49,999	12,977	4.0%	1,256	4.1%
\$50,000 to \$59,999	24,348	7.6%	2,615	8.6%
\$60,000 to \$74,999	28,613	8.9%	3,398	11.2%
\$75,000 to \$99,999	32,031	10.0%	4,194	13.8%
\$100,000 to \$124,999	21,837	6.8%	3,544	11.7%
\$125,000 to \$149,999	12,626	3.9%	2,102	6.9%
\$150,000 to \$199,999	13,889	4.3%	2,173	7.2%
\$200,000 or more	20,834	6.5%	2,481	8.2%
Total Households	321,266	100%	30,326	100%

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, P52)



**Figure 1.4**

Looking at the lower income groupings, more than one-quarter (27.4 percent) of the county's households had incomes less than \$25,000 in 1999. This compares with only 10.4 percent of Roswell's households with incomes of less than \$25,000. Hence, the City had a much higher percentage of higher-income households than Fulton County as a whole, and the county had a higher percentage of lower-income households than Roswell in 1999.

### **Poverty Status by Age Group**

Table 1.27 provides poverty status in 1999 by age group for Fulton County and the City of Roswell. With a total population of 816,006, Fulton County had approximately 15.2 percent of its total population living below the poverty line in 1999. With 79,334 residents, Roswell had 5.0 percent of its total residents with 1999 incomes below poverty level.

**Table 1.27**  
**Persons Below Poverty Level by Age Group In 1999**  
**Fulton County and City of Roswell**

Age Group	Fulton County		City of Roswell	
	Persons	%	Persons	%
Under 5 years	13,492	10.9%	273	6.8%
5 years	2,652	2.1%	40	1.0%
6 to 11 years	16,612	13.4%	400	10.0%
12 to 17 years	12,236	9.8%	338	8.4%
18 to 64 years	68,930	55.5%	2,575	64.3%
65 to 74 years	4,968	4.0%	141	3.5%
75 years and over	5,351	4.3%	239	6.0%
Total persons with income in 1999 below poverty level	124,241	100%	4,006	100%

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, Table P87).

## **PROJECTIONS**

### **Population Projections**

The City's population projections are shown in Table 1.28. Projections, as described in the appendix to this Chapter, are based on assumptions about the rate of natural increase, the amount of vacant residential land remaining in the City, the density of new residential development, and prospects for redevelopment involving new housing units.

As noted earlier in this Chapter, through natural increase alone at historic rates (births minus deaths), Roswell's population would increase by approximately 500 persons annually (10,000 during the twenty-year planning horizon). This means that if no additional housing units were constructed, there would still be a significant increase in the City's population. However, the historic rate of natural increase is unlikely to be sustained – births are likely to decline in comparison with historical rates because of the increasing age of the population (and corresponding decline in fertility and birth rates as age increases). The death rate is likely to decrease some, due to advances in medicine and a general trend toward people living longer lives. However, the rate of natural increase of Roswell's population is likely to slow considerably during the planning horizon.

As discussed more fully in the Land Use Element, Roswell's residential land supply is increasingly scarce. It is estimated that Roswell has the capacity for about 2,000 additional housing units on the remaining residential land in the City. At the prevailing household size of 2.6 persons per unit, new housing units will lead to a population increase of approximately 5,200 persons. Because the residential market continues to be strong in Roswell, the remaining residential vacant land is likely to be developed in the next ten years, as opposed to residential development being evenly spread over the twenty-year planning horizon. That is, the rate of construction of housing units will be faster in the first ten years (2005-2015) than it will in the second decade of the planning horizon (2016-2025).

The population projections in Table 1.28 incorporate these assumptions. The projections do not assume any annexation by the City. Roswell's population will increase by an estimated 13,727 persons between 2005 and 2025. The growth rate will slow during the 20-year time period because of overall declines in the rates of natural increase and fewer and fewer opportunities for new residential land development.

**Table 1.28**  
**Household and Group Quarters Population Projections, 2000-2030**  
**City of Roswell**

<b>Share of Total Population</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Household Population	78,706	84,244	88,251	91,880	94,754	96,907	98,557
Group Quarters Population	628	756	907	1,063	1,429	1,820	2,144
<b>Total</b>	<b>79,334</b>	<b>85,000</b>	<b>89,158</b>	<b>92,943</b>	<b>96,183</b>	<b>98,727</b>	<b>100,701</b>

Source: Jerry Weitz & Associates, Inc. 2004. Revised March 2005.

### **Household Projections**

Households can only increase if new housing units are constructed. A large part of the household population increase from 2005 to 2025 is due to natural increase (births minus deaths). Generally, increases in household population attributed to births do not lead to a larger number of households, as the new household member born is accommodated in the existing household. Roswell's households will increase by approximately 2,000, from 2005 to 2025. Projections of households are provided in Table 1.29. Although the formation of new households was substantially higher from 2000 to 2005 (i.e., increased number of housing units), the residential land supply will be exhausted by 2025, limiting capacity for new housing growth.

**Table 1.29**  
**Household Size and Household Projections, 2000-2030**  
**City of Roswell**

<b>Share of Total Population</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Household Population	78,706	84,244	88,251	91,880	94,754	96,907	98,557
New Households formed	--	2,194	700	600	450	250	0
<b>Total Households</b>	<b>30,207</b>	<b>32,401</b>	<b>33,101</b>	<b>33,701</b>	<b>34,151</b>	<b>34,401</b>	<b>34,401</b>

Source: Jerry Weitz & Associates, Inc. 2004. Revised March 2005.

### **Population Projections by Age**

Table 1.30 provides population projections by age cohort. As noted in Chapter 2 “Population Inventory”, age distribution is very important in terms of determining future needs for housing and human services. It is fruitful to reexamine the change in age distribution among the various age cohorts from 1990 to 2000 in Roswell (Table 1.12), because they provide clues toward future change.

Between 1990 and 2000, all of the youngest age cohorts decreased as a percent of the total population. The most significant decrease occurred in the 40-44 age cohort, while there were also substantial drops in the percentage of total population in the 30-34 and 35-39 age cohorts between 1990 and 2000.

Except for the 65-69 age group, which decreased, all of the age cohorts above 50 years of age increased in terms of their percentage of total population, between 1990 and 2000 in Roswell. It is not surprising that these older age cohorts are increasing in share of total population, given our trend toward an increasingly older society. What is somewhat surprising was the drop in percentage of persons in the 65-69 age group in Roswell from 1990 to 2000. This may be an anomaly, or, it may signal a trend for residents who reach their initial retirement age to seek housing elsewhere, outside Roswell, perhaps in places more conducive to their retirement status. As more and more of Roswell's population become elderly, it is anticipated that the 65-69 age cohort will increase in terms of the percentage of total population.

The age-specific population projections assume that the changes in the age distribution of Roswell's population that occurred during the 1990s, which represent an increasing aging population, will continue in future years.

**Table 1.30**  
**Population Projections by Age Cohort, 2005-2025**  
**City of Roswell**

Age Group	2005	%	2010	%	2015	%	2020	%	2025	%
0-4	5,780	6.8%	5,974	6.7%	6,134	6.6%	6,252	6.5%	6,319	6.4%
5-9	5,525	6.5%	5,617	6.3%	5,762	6.2%	5,867	6.1%	5,924	6.0%
10-14	5,610	6.6%	5,795	6.5%	5,948	6.4%	6,060	6.3%	6,121	6.2%
15-19	5,270	6.2%	5,528	6.2%	5,670	6.1%	5,771	6.0%	5,825	5.9%
20-24	5,100	6.0%	5,171	5.8%	5,205	5.6%	5,290	5.5%	5,330	5.4%
25-29	7,140	8.4%	7,400	8.3%	7,621	8.2%	7,791	8.1%	7,898	8.0%
30-34	7,140	8.4%	7,222	8.1%	7,342	7.9%	7,406	7.7%	7,405	7.5%
35-39	7,650	9.0%	7,935	8.9%	8,179	8.8%	8,368	8.7%	8,491	8.6%
40-44	7,480	8.8%	7,846	8.8%	7,993	8.6%	8,079	8.4%	8,095	8.2%
45-49	7,310	8.6%	7,846	8.8%	8,272	8.9%	8,753	9.1%	9,083	9.2%
50-54	6,970	8.2%	7,578	8.5%	8,179	8.8%	8,656	9.0%	8,984	9.1%
55-59	4,675	5.5%	4,993	5.6%	5,391	5.8%	5,675	5.9%	6,022	6.1%
60-64	2,805	3.3%	3,031	3.4%	3,253	3.5%	3,463	3.6%	3,653	3.7%
65-69	1,870	2.2%	2,051	2.3%	2,231	2.4%	2,405	2.5%	2,567	2.6%
70-74	1,615	1.9%	1,783	2.0%	1,952	2.1%	2,116	2.2%	2,271	2.3%
75-79	1,360	1.6%	1,516	1.7%	1,673	1.8%	1,828	1.9%	1,975	2.0%
80-84	850	1.0%	981	1.1%	1,115	1.2%	1,250	1.3%	1,382	1.4%
85+	850	1.0%	891	1.0%	1,023	1.1%	1,153	1.2%	1,382	1.4%
<b>TOTAL</b>	<b>85,000</b>	<b>100</b>	<b>89,158</b>	<b>100</b>	<b>92,943</b>	<b>100</b>	<b>96,183</b>	<b>100</b>	<b>98,727</b>	<b>100</b>

Source: Jerry Weitz & Associates, Inc. 2004. Revised March 2005.

### **FUNCTIONAL POPULATION**

The functional population of the City is considered to be the daytime population. The functional population is the resident population, minus those residents who are in the labor force, plus those employed in the City.

Functional Population = residents – City labor force + employed in City.

Year 2005: 85,000 – 37,000 + 44,000 = 92,000

The most important implications of the functional population relate to the provision of community facilities and services generally, and more specifically, public safety services. In this regard, though a housing unit may be vacated during the day (because the household is at work outside the City, or children are at school), the functional population for purposes of public service impact (like fire and police) is larger (i.e., the labor force is not subtracted from the functional population for impact fees, since police and fire services still must respond even if some housing units are vacant).

When residents leave their homes to go to work, there is a geographic shift of the population within the City from residential neighborhoods to employment areas. There is less activity in residential neighborhoods during the daytime. In the commercial areas of the City, there is more congestion and thus traffic enforcement and public safety calls to businesses may be

more frequent. The transportation system (see Transportation Element) must be able to accommodate these work travel patterns (see Economic Development Element). A higher level of water use may occur if water-consuming industry operates more frequently during daytime hours.

## **SPECIAL NEEDS POPULATIONS**

### **Elderly Households**

Table 1.31 provides data on the type of households with persons who were 75 years and over in the year 2000. Of particular interest or concern are the elderly householders living alone, which totaled 795. These elderly individuals may have no one to care for them in the event of illness, disability, or other difficulty. Such elderly persons are increasingly unlikely to be able to live alone, thus requiring supervised care or at least a watchful eye. Also, nearly 2,000 households in Roswell in the year 2000 had one or more elderly persons who may eventually require a different type of home (i.e., personal care).

**Table 1.31**  
**Households by Presence of People 75 Years and Over, 2000**  
**City of Roswell**

	1-person Household	2 or More Person Family Household	2 or More Person Nonfamily Household	Total Households
Households With One or More People 75 Years and Over	795	1,144	32	1,971

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, Table P24).

### **Households with Linguistic Isolation**

A linguistically isolated household as defined by the Census is one in which no member 14 years old and over (1) speaks only English or (2) speaks a non-English language and speaks English "very well." In other words, all members 14 years old and over have at least some difficulty with English. Table 1.32 provides data on linguistically isolated households in Roswell in 2000. The vast majority of linguistically isolated households in 2000 in Roswell were Spanish.

**Table 1.32**  
**Linguistically Isolated Households by Language, 2000**  
**City of Roswell**

	Spanish	Other Indo-European Languages	Asian and Pacific Island Languages	Other Languages	Total
Linguistically Isolated Households	1,156	203	278	7	1,644

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, Table P20).

## **Disabilities**

Persons with disabilities may require special accommodations. Table 1.33 shows disabilities by type of disability for the White population in Roswell in 2000. The most frequent disability for Whites is physical disability, followed by go-outside-home disability.

**Table 1.33**  
**Disabilities by Type by Age, White Alone, 2000**  
**Population 5 Years and Over with Disabilities**  
**City of Roswell**

<b>Roswell (age category in years)</b>	<b>Sensory Disability</b>	<b>Physical Disability</b>	<b>Mental Disability</b>	<b>Self-care Disability</b>	<b>Go- outside- home Disability</b>	<b>Employment Disability</b>	<b>Total Disabil- ities Tallied</b>
5 to 15	112	60	386	32	n/c	n/c	590
16 to 64	553	1,154	740	291	1,206	3,076	7,020
65 +	771	1,394	721	563	1,166	n/c	4,615
<b>Total</b>	<b>1,436</b>	<b>2,608</b>	<b>1,847</b>	<b>886</b>	<b>2,372</b>	<b>3,076</b>	<b>12,225</b>

n/c = not classified

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, Table PCT 67A).

Table 1.34 shows disabilities by type of disability for the Black or African American population in Roswell in 2000. The most frequent disability for Blacks is employment disability, followed by mental disability.

**Table 1.34**  
**Disabilities by Type by Age, Black or African American Alone, 2000**  
**Population 5 Years and Over with Disabilities**  
**City of Roswell**

<b>Roswell (age category in years)</b>	<b>Sensory Disability</b>	<b>Physical Disability</b>	<b>Mental Disability</b>	<b>Self-care Disability</b>	<b>Go- outside- home Disability</b>	<b>Employment Disability</b>	<b>Total Disabil- ities Tallied</b>
5 to 15	12	6	58	6	n/c	n/c	82
16 to 64	34	134	131	31	176	514	1,020
65 +	64	93	107	85	89	n/c	438
<b>Total</b>	<b>110</b>	<b>233</b>	<b>296</b>	<b>122</b>	<b>265</b>	<b>514</b>	<b>1,540</b>

n/c = not classified

Source: U.S. Census Bureau, Census of Population and Housing, 2000 (SF3, Table PCT 67A).



## **APPENDIX POPULATION PROJECTION METHODS**

A description of various methods of projecting population and an analysis of their accuracy follows.

### **Proportional or Ratio Methods**

One method of projecting population is the proportional (or ratio) share method. This method of projecting the City's population assumes that the City will maintain its current share (proportion) of the total population of a parent area. Roswell could maintain a constant share of Fulton County's population. This method probably would result in low projections for Roswell, because Fulton County's growth rate has been considerably slower than Roswell's.

Second, Roswell could maintain a constant share of the Atlanta region's population increase. Projections by this method might be reasonable. Roswell has constrained boundaries, however, and much of the new development in the Atlanta region will occur in outlying or fringe areas where more land is available. For this reason, constant regional share projections would be considered higher than what could be expected for Roswell.

Roswell could also maintain a constant share of the population projected by the Atlanta Regional Commission for North Fulton County Census tracts within which Roswell resides. A similar method was used in the 2010 Comprehensive Plan and the 2020 Comprehensive Plan. Projections by this method are considered too low. ARC's projections by Census tract suggest that residential development is likely to slow down substantially in Roswell, again due to increasingly scarce vacant land supplies. On the other hand, through annexation Roswell has and may continue to grow at the pace of North Fulton County.

### **Linear Extrapolation Methods**

One of the most common population projection methods is a linear extrapolation of past trends into the future. This method of projection assumes a constant increase of  $x$  persons every five years, based on the absolute increase in population Roswell experienced in the past.

While linear extrapolation methods are quick and simple, they are also considered to be the least accurate because population change rarely occurs in a consistent linear direction. Linear extrapolations assume that birth and death rates, migration, economic conditions, and other important variables will remain constant over time, which is rarely the case. Furthermore, Roswell's geography has changed over time through annexation, rendering linear extrapolation methods inapplicable since different sets of geography would be compared.

### **Housing Unit with Constrained Land Supply Method**

The projection methods described above are unconstrained in the sense that they assume an unlimited supply of land for residential development. Roswell does not have an unlimited supply of vacant land for residential growth at past rates of development. The other projection methods are not reliable if there is physically no room to house the additional persons forecasted to be added to the City's population.

Another method might be called constrained land supply. The land use capacity method recognizes that future populations will consume land and that land may be in limited supply. This projection method is designed to take into account the availability of residential land, probable densities of residential development, and the rate at which development will occur. It is based on some limited assumptions and a detailed vacant lands inventory that calculates yields of units per acre for each vacant parcel, after considering flood plain and other natural constraints.

This is the method selected for projecting Roswell's population in Roswell's 2020 Plan. For the 2025 update, a detailed vacant lands inventory was not part of the work scope. Some consideration was given to the amount of vacant land available in constraining Roswell's population projections. However, land supply methods do not account for redevelopment, and as Roswell enters the year 2005 the prospects for mixed-use redevelopment (including residences) becomes more likely.

### **Cohort-Component Method**

A more sophisticated and complex approach of projecting population is known as the cohort-component method. This method has value in estimating the age of the future population. This method recognizes that population varies because of dying, birthing, and migration. More simply, population change is a function of natural increase or decrease (births minus deaths) and net-migration (in-migration minus out-migration in/out of the area under study). This method disaggregates the changes in population resulting from the separate components of natural increase and migration. The second part of this method projects population according to age groups or "cohorts." Cohorts are usually classifications containing five years of age (0-4, 5-9, 10-14) because they enable a carrying ahead or "survival" of the population at future five-year intervals. For example, persons that are 0-4 years old in the year 2000 will be 5-9 years old in the year 2005, assuming no in-migration or out-migration. This method allows for adjustment of the "survivors" based on mortality rates and migration for each age cohort, in cases where such data are available. A new 0-4 age group is then introduced using birth or fertility rates.

Projecting population by cohorts has advantages because the effects of changes on the age structure of the population become evident. For example, because of the age detail, the population projections derived from the cohort-component method can help the community plan for future school enrollments and elderly services and better recognize changes in its labor force. This method has several strengths and is widely used in projecting the populations of regions. It is not used as often at the municipal level of population projection because of limited migration data. To effectively apply this technique, the staff would need age-specific in-migration and out-migration data that are not currently available.

### **Housing Unit Method**

The housing unit method is often considered the most appropriate means of projecting household population for several reasons. First, the Atlanta Regional Commission uses housing unit data as the basis for estimating population, and ARC's data are typically the most current. Second, the City has building permit data for current estimates.

A typical projection sequence would be to extrapolate out the population, then determine the number of households by predicting future household sizes, then project the number of housing units needed to house the population. With the housing unit method of population projection,

the sequence is reversed.

Household size varies by type of housing unit. The housing unit method is also advantageous because it is subject to greater refinement when accurate counts of the types of housing units exist (i.e., single family vs. apartments), since both household size and vacancy rates vary by housing types. Simpler methods will use an average household size rather than separate multipliers for each housing type. Because the City's data are not detailed enough to implement unit-specific average household sizes, composite average household sizes are often used to forecast household population.

### Previous Population Projections

The 2020 Comprehensive Plan reported the following projections. These projections recognize that the rate of population growth after 2015 in Roswell will be slowed due to buildout (development of vacant residentially zoned lands).

	2005	2010	2015	2020
Roswell Planning Area	102,460	105,211	108,142	110,597
Roswell City Limits with Anticipated Annexation	88,366	93,591	99,128	101,787
Roswell City Limits	79,529	81,825	84,258	86,519
ARC 2030 Census Tract Projections Aligned with Roswell's City Limits	82,497	83,692	85,836	87,980

Source: Roswell 2020 Comprehensive Plan; Atlanta Regional Commission, 2004 (2030 projections by Census tract).

Note: Roswell's approximate geography is the following year 2000 Census tracts or parts thereof in North Fulton County: 114.03, 114.04, 114.05, 114.06, 114.07, 114.10, 114.11, 114.12, 114.13 (35% Roswell), 115.02, 116.05 (30% Roswell) selected for purposes of population analysis only.

The Atlanta Regional Commission's 2030 projections are available at the Census tract level, but ARC does not provide projections for municipal geographies. Roswell's city limits follow Census tract boundaries, however, in all but a few Census tracts.

ARC's projections of population by Census tract, aggregated and shown above for Roswell, are too low given Roswell's own local estimate of 85,000 in 2005. Accepting ARC's population projections by Census tract would thus suggest that Roswell's population would not grow during the next ten years. Roswell does not accept ARC's projections based on Census tract data since they do not account for any growth in the City's population and the City has recent evidence to the contrary – certificates of occupancy issued for dwelling units.

### REFERENCES

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